

IN THE CLAIMS:

1. (Currently amended) An external defibrillator comprising:
defibrillation circuitry housed within an enclosure;
a first processor programmed to periodically test the operability of the defibrillation circuitry;
a second processor in communication with the first processor, said second processor controlling power to said defibrillation circuitry and said first processor to turn the defibrillator on or off; and
a visual indicator positioned at the exterior of the enclosure and operatively connected to the second processor;
wherein the second processor is programmed to control the visual indicator to continually indicate a status of the defibrillator when the defibrillator is on and when the defibrillator is off in response to the periodic test result, and wherein the visual indicator presents a first color indication and the second processor is programmed to cause the visual indicator to intermittently present the first color indication when the defibrillator is off and the periodic test result is that the defibrillation circuitry is ready to operate normally, such that failure of said visual indicator to intermittently present the first color indication when the defibrillator is off ~~indicate a status of the defibrillator~~ indicates an error condition.

2. (Previously presented) The defibrillator of claim 1 wherein the second processor is programmed to cause the visual indicator to continuously present the first

color indication when the defibrillator is on and the periodic test result is that the defibrillation circuitry is operating normally.

3. (Cancelled)

4. (Previously presented) The defibrillator of claim 1 wherein the visual indicator presents a second color indication and the second processor is programmed to cause the visual indicator to continuously present the second color indication when the defibrillator is on and the periodic test result has detected an error in the defibrillation circuitry.

5. (Previously presented) The defibrillator of claim 1 wherein the visual indicator presents a second color indication and the second processor is programmed to cause the visual indicator to intermittently present the second color indication when the defibrillator is off and the periodic test result has detected an error in the defibrillation circuitry.

6. (Original) The defibrillator of claim 5 wherein the defibrillation circuitry includes a battery pack.

7. (Original) The defibrillator of claim 1 wherein the first processor and the second processor are combined in a single processor.

8. (Currently amended) An external defibrillator comprising:
defibrillation circuitry housed within an enclosure;
an electrode pad assembly adapted for electrical communication with the defibrillation circuitry at one end and a patient at the other end;

a processor programmed to monitor the operation of the defibrillation circuitry and electrode pad assembly; and

a visual indicator positioned at the exterior of the enclosure and operatively connected to the processor;

wherein the processor is programmed to control the visual indicator to continually indicate a status of the defibrillator when the defibrillator is on and when the defibrillator is off in response to the results of the operation monitoring, and wherein the visual indicator presents a first color indication and the processor is programmed to cause the visual indicator to intermittently present the first color indication when the defibrillator is off and the periodic test result is that the defibrillation circuitry is ready to operate normally, such that failure of said visual indicator to intermittently present the first color indication when the defibrillator is off ~~indicate a status of the defibrillator~~ indicates an error condition.

9. (Previously presented) The external defibrillator of claim 8 wherein the defibrillation circuitry and the electrode pad assembly comprise electrical circuitry defining a high impedance threshold and a low impedance threshold and the processor is programmed to measure the impedance across the electrode pads, compare the impedance to the high impedance threshold and the low impedance threshold and activate the visual indicator when the measured impedance is either below the low impedance threshold or above the high impedance threshold.

10. (Previously presented) The external defibrillator of claim 9 wherein the visual indicator comprises a LED and the processor activates the LED by causing the LED to blink.

11. (Previously presented) The external defibrillator of claim 10 wherein the visual indicator further comprises a visual message display related to the operation being monitored.

12. (Previously presented) The external defibrillator of claim 11 wherein the visual message display relates to a direction to check the electrode pads.

13. (Previously presented) The external defibrillator of claim 9 further comprising a speaker, wherein the processor is further programmed to output an auditory message through the speaker related to the operation being monitored.

14. (Previously presented) The external defibrillator of claim 13 wherein the auditory message relates to a direction to connect the electrode pads.

15. (Previously presented) The external defibrillator of claim 8 wherein the defibrillation circuitry and the electrode pad assembly comprise electrical circuitry defining an impedance range proper for ECG analysis and shock delivery and the processor is programmed to measure the impedance across the electrode pads, compare the impedance to the impedance range and activate the visual indicator when the measured impedance is outside the impedance range.

16. (Previously presented) The external defibrillator of claim 15 wherein the visual indicator comprises a LED and the processor activates the LED by causing the LED to blink.

17. (Previously presented) The external defibrillator of claim 16 wherein the visual indicator further comprises a visual message display related to the operation being monitored.

18. (Previously presented) The external defibrillator of claim 17 wherein the visual message display relates to a direction to check the electrode pads.

19. (Previously presented) The external defibrillator of claim 15 further comprising a speaker, wherein the processor is further programmed to output an auditory message through the speaker related to the operation being monitored.

20. (Previously presented) The external defibrillator of claim 19 wherein the auditory message relates to a direction to check the electrode pads.

21. (Previously presented) The external defibrillator of claim 8 wherein the processor is programmed to analyze ECG signals based on electrical signals received through the electrode pads; monitor the ECG signals for spikes, noise and weak amplitude; and activate the visual indicator under any one of the following conditions: ECG signals being analyzed, spike detected, and noise or weak amplitude detected.

22. (Previously presented) The external defibrillator of claim 21 wherein the visual indicator comprises a LED and the processor activates the LED by causing the LED to blink.

23. (Previously presented) The external defibrillator of claim 22 wherein the visual indicator further comprises a visual message display related to the operation being monitored.

24. (Previously presented) The external defibrillator of claim 23 wherein the visual message display relates to a direction to not to touch the patient.

25. (Previously presented) The external defibrillator of claim 21 further comprising a speaker, wherein the processor is further programmed to output an auditory message through the speaker related to the condition.

26. (Previously presented) The external defibrillator of claim 25 wherein the condition comprises ECG signals being analyzed and the auditory message relates to a direction to not to touch the patient.

27. (Previously presented) The external defibrillator of claim 25 wherein the condition comprises a spike detected and the auditory message relates to a direction to stop motion.

28. (Previously presented) The external defibrillator of claim 25 wherein the condition comprises noise or weak amplitude detected and the auditory message relates to a direction to stop interference.

29. (Previously presented) The external defibrillator of claim 8 wherein the processor is programmed to analyze ECG signals based on electrical signals received through the electrode pads and activate the visual indicator during signal analysis.

30. (Previously presented) The external defibrillator of claim 29 wherein the visual indicator comprises a LED and the processor activates the LED by causing the LED to blink.

31. (Previously presented) The external defibrillator of claim 30 wherein the visual indicator further comprises a visual message display related to the operation being monitored.

32. (Previously presented) The external defibrillator of claim 31 wherein the visual message display relates to analyzing heart rhythm.

33. (Previously presented) The external defibrillator of claim 29 further comprising a speaker, wherein:

the defibrillation circuitry and the electrode pad assembly comprise electrical circuitry defining an impedance range proper for ECG analysis and shock delivery; and

the processor is programmed to:

output a first auditory message through the speaker when ECG signals are being analyzed;

measure the impedance across the electrode pads, compare the impedance to the impedance range and output a second auditory message through the speaker when the measured impedance is outside the impedance range; and

monitor the ECG signals for spikes, noise and weak amplitude; and output a third auditory message through the speaker under either of the following conditions: spike detected, and noise or weak amplitude detected.

34. (Previously presented) The external defibrillator of claim 33 wherein the first auditory message relates to the act of analyzing heart rhythm.

35. (Previously presented) The external defibrillator of claim 33 wherein the second and third auditory messages relate to the interruption of heart rhythm analysis.

36. (New) A method for operating an external defibrillator, comprising:
providing defibrillation circuitry housed within an enclosure; a first processor programmed to periodically test the operability of the defibrillation circuitry; a second processor in communication with the first processor, said second processor controlling power to said defibrillation circuitry and said first processor to turn the defibrillator on or off; and a visual indicator positioned at the exterior of the enclosure and operatively connected to the second processor; and

wherein said second processor controls the visual indicator to continually indicate a status of the defibrillator when the defibrillator is on and when the defibrillator is off in response to the periodic test result, and wherein the visual indicator presents a first color indication and the second processor causes the visual indicator to intermittently present the first color indication when the defibrillator is off and the periodic test result is that the defibrillation circuitry is ready to operate normally, such that failure of said visual indicator to intermittently present the first color indication when the defibrillator is off indicates an error condition.

37. (New) The method of Claim 36, wherein the second processor causes the visual indicator to continuously present the first color indication when the defibrillator is on and the periodic test result is that the defibrillation circuitry is operating normally.

38. (New) The method of Claim 36, wherein the visual indicator presents a second color indication and the second processor causes the visual indicator to continuously present the second color indication when the defibrillator is on and the periodic test result has detected an error in the defibrillation circuitry.

39. (New) The method of Claim 36, wherein the visual indicator presents a second color indication and the second processor causes the visual indicator to intermittently present the second color indication when the defibrillator is off and the periodic test result has detected an error in the defibrillation circuitry.

40. (New) A method for operating an external defibrillator, comprising:
providing defibrillation circuitry housed within an enclosure;
an electrode pad assembly adapted for electrical communication with the defibrillation circuitry at one end and a patient at the other end;
a processor programmed to monitor the operation of the defibrillation circuitry and electrode pad assembly; and
a visual indicator positioned at the exterior of the enclosure and operatively connected to the processor; and
wherein the processor controls the visual indicator to continually indicate a status of the defibrillator when the defibrillator is on and when the defibrillator is off in response to the results of the operation monitoring, and wherein the visual indicator presents a first color indication and the processor causes the visual indicator to intermittently present the first color indication when the defibrillator is off and the periodic test result is that the defibrillation circuitry is ready to operate normally, such that failure of said visual indicator to intermittently present the first color indication when the defibrillator is off indicates an error condition.

41. (New) The method of Claim 40, wherein the defibrillation circuitry and the electrode pad assembly comprise electrical circuitry defining a high impedance threshold

and a low impedance threshold and the processor measures the impedance across the electrode pads, compares the impedance to the high impedance threshold and the low impedance threshold and activates the visual indicator when the measured impedance is either below the low impedance threshold or above the high impedance threshold.

42. (New) The method of Claim 41, wherein the visual indicator comprises a LED and the processor activates the LED by causing the LED to blink.

43. (New) The method of Claim 40, wherein the defibrillation circuitry and the electrode pad assembly comprise electrical circuitry defining an impedance range proper for ECG analysis and shock delivery and the processor measures the impedance across the electrode pads, compares the impedance to the impedance range and activates the visual indicator when the measured impedance is outside the impedance range.

44. (New) The method of Claim 43, wherein the visual indicator comprises a LED and the processor activates the LED by causing the LED to blink.

45. (New) The method of Claim 40, wherein the processor analyzes ECG signals based on electrical signals received through the electrode pads; monitors the ECG signals for spikes, noise and weak amplitude; and activates the visual indicator under any one of the following conditions: ECG signals being analyzed, spike detected, and noise or weak amplitude detected.

46. (New) The method of Claim 45, wherein the visual indicator comprises a LED and the processor activates the LED by causing the LED to blink.

47. (New) The method of Claim 40, wherein the processor analyzes ECG signals based on electrical signals received through the electrode pads and activates the visual indicator during signal analysis.

48. (New) The method of Claim 47, wherein the visual indicator comprises a LED and the processor activates the LED by causing the LED to blink.